

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended): A display unit comprising:
 2. a plurality of electron emission devices arranged in a matrix format;
 3. a plurality of scan lines arranged in a row direction and connected to the plurality of electron emission devices;
 5. a plurality of data lines arranged in a column direction and connected to the plurality of electron emission devices;
 7. a scan driver for supplying a selection signal for selecting a line of electron emission devices to the scan lines sequentially in the column direction;
 9. a data driver for supplying drive signals based on video data for driving the electron emission devices to each of the plurality of data lines ~~a video signal-based drive signal for driving the electron emission devices~~; and
 12. a signal ~~corrector~~correction circuit for correcting each of the drive signals to be supplied to the plurality of data lines in accordance with the video signal.
wherein the signal correction circuit corrects the drive signals using a cumulative value of the video data corresponding to said drive signals.
2. (Original): The display unit according to claim 1 wherein the signal correction circuit provides corrections which vary with the position of the plurality of electron emission devices in the row direction.
3. (Original): The display unit according to claim 1 wherein an electrical current flows to each electron emission device in accordance with the potential difference between a selection signal and drive signal supplied to a plurality of electron emission devices in the selected line, and the correction values are determined so as to compensate for a voltage

5 decrease in the row direction of each of the plurality of electron emission devices that is
6 determined by the value of the current and the wiring resistance of the scan lines at various
7 positions of a plurality of electron emission devices arranged in the row direction.

1 4. (Currently amended): A display unit comprising:
2 a display panel including scan lines, data lines, and a plurality of electron
3 emission devices arranged in a matrix format, the display panel responsive to a scan line
4 selection signal to select a scan line thereby selecting a line of electron emission devices, and
5 further responsive to a plurality of drive signals to drive each electron emission device of the line
6 of electron emission devices, the drive signals being based on corresponding video data to which
7 a selection signal is supplied for selecting a line of a plurality of electron emission devices
8 arranged in a matrix format and data lines to which a video signal based drive signal is supplied
9 for driving the plurality of electron emission devices; and

10 a signal correctorcorrection circuit,

11 wherein a current according to a potential difference between the selection signal
12 and the drive signals flows to a plurality corresponding electron emission devices of the line of
13 electron emission devices in along the selected scan line via scan lines connected to a plurality of
14 electron emission devices in the selected line so that the electron emission devices emit electrons
15 in accordance with the electric currents; and

16 wherein the signal correctorcorrection circuit corrects each of the drive signals to
17 be supplied to a plurality of the corresponding electron emission devices in the selected line in
18 accordance with the video signal in order to compensate for a voltage decrease that arises when
19 the current flows along the selected scan line, the drive signals being corrected based on
20 cumulative values of the video data to scan lines connected to a plurality of electron emission
21 devices in the selected line.

1 5 . (Currently amended): A display unit comprising:
2 a plurality of scan lines extending in a row direction;
3 a plurality of data lines extending in a column direction;
4 an electron emission device positioned at intersections of the plurality of scan
5 lines and the plurality of data lines;
6 a scan driver for supplying a selection signal to sequentially select a-lines of the
7 electron emission devices to the plurality of scan lines sequentially in the column direction;
8 a data driver for supplying drive signals based on video data to drive electron
9 emission devices of a selected line of electron emission devices to each of the plurality of data
10 lines a video signal based drive signal for driving the electron emission devices; and
11 a signal correctorcorrection circuit for individually correcting the drive signals to
12 be supplied respectively to the plurality of electron emission devices,
13 wherein the signal correctorcorrection circuit corrects each of the drive signal[[s]]
14 by adding a correction value to the its corresponding video data, levels of the correction values
15 used to drive the electron emission devices being based on the position of the electron emission
16 device within the selected line of electron emission devices, the correction values being based on
17 cumulative values of the video data signal correction values appropriate for a plurality of electron
18 emission devices arranged in the row direction, so that each of the correction values varies with
19 the magnitude of the video signal.

1 6 . (Original): The display unit according to claim 5 wherein the scan driver
2 is connected to one end of the scan lines so that the correction values increase with an increase in
3 the distance between electron emission devices connected to the scan lines and the scan driver
4 while the video signal remains constant.

1 7 . (Original): The display unit according to claim 5 wherein the correction
2 values are determined in accordance with the magnitude of voltage decrease at each position of a
3 plurality of electron emission devices connected to the scan lines.

1 8. (Currently amended): A display unit, comprising:
2 a display panel in which $m \times n$ electron emission devices are arranged in a matrix
3 format and positioned at the intersections of m scan lines and n data lines, and phosphors are
4 positioned opposite the electron emission devices;
5 a data driver for ~~sequentially supplying a column of video signal based drive~~
6 signals to the n data lines, each drive signal based on corresponding video data;
7 a scan driver for ~~adding sequentially supplying a selection signal to at least one of~~
8 the m scan lines for selecting a line of ~~the~~ electron emission devices ~~to the m scan lines~~
9 sequentially in the column direction; and
10 a signal ~~corrector~~correction circuit for compensating for a voltage increase caused
11 by ~~the value I_i ($i = 1$ to n) of a current, I_i ($i = 1$ to n), which flows from~~ said data lines to a
12 selected scan line, each of n column wiring lines to the scan wiring for the selected line, when
13 the scan driver selects a line.
14 wherein the signal correction control circuit corrects the drive signals based on
15 cumulative values of the video data.

1 9. (Currently amended): The display unit according to claim 8 wherein the
2 signal ~~corrector~~correction circuit corrects the video data to be supplied to the data driver, and
3 uses the value $D_i + C_i$ as the video signal when the video signal correction amount C_i is
4 determined from Equation 1 below where columns are sequentially designated 1, 2, 3, and so on
5 to n beginning with the one closest to the scan driver, the video signal amplitude of the i -th
6 column is D_i , and a predetermined coefficient is k :

7
$$C_i = C_{i-1} + \sum_{j=1}^n k \cdot D_j \quad \text{Equation 1}$$

8 where $i, j \geq 1$, $c_0 = 0$, k = coefficient, and n = data line count.

10. (Canceled)

1 11. (Currently amended): The display unit according to claim 8 wherein the
2 signal ~~corrector~~correction circuit corrects the video data to be supplied to the data driver, the
3 data driver has been positioned at the other side of an initial data line to supply the drive signal-a
4 data drive circuit for driving the video signal, positions the scan driver toward column n, and the
5 signal correction circuit provides cumulative additive correction by multiplying the video signal
6 amplitude Di of the i-th column by a predetermined coefficient.

1 12. (Currently amended): A display unit, comprising:
2 a display panel ~~in which~~having a plurality of scan lines extending in a row
3 direction, a plurality of data lines extending in a column direction, and a plurality of electron
4 emission devices ~~are mounted~~disposed at intersections of the plurality of scan lines and the
5 plurality of data lines;
6 a scan driver for sequentially supplying a selection signal to the plurality of scan
7 lines in the column direction to sequentially select lines for selecting a line of the plurality of
8 electron emission devices to the plurality of scan lines sequentially in the column direction;
9 a data driver for supplying a ~~video signal~~based drive signals for driving the
10 corresponding electron emission devices ~~to each~~of a selected line of electron emission devices
11 via the plurality of data lines;
12 an ~~input section for entering the video signal and~~ a video signal processor ~~circuit~~
13 for processing the video signal and outputting the processed video signal as video data entered
14 ~~from the input section;~~
15 an interface section for transmitting~~[/]~~and receiving the video data signal output
16 from the video signal processor ~~circuit in digital form~~; and
17 a signal ~~corrector~~correction circuit for ~~correcting a digital~~ configured to produce
18 corrected video data by adding correction values to the video data signal received by from the
19 interface section and supply~~[ing]~~ the corrected video data signal to the data driver,
20 wherein the data driver generates the drive signals based on the corrected video
21 data.

22 wherein levels of the correction values for the electron emitting devices in a
23 selected line of electron emitting devices are based on positions of the electron emission devices
24 in the selected line, the correction values being cumulative of the video data corresponding to the
25 selected line of electron emitting devices ~~the signal corrector circuit corrects the drive signals to~~
26 ~~be supplied to a plurality of electron emission devices by adding correction values appropriate~~
27 ~~for the plurality of electron emission devices arranged in the row direction after calculating the~~
28 ~~correction values in accordance with the digital video signal.~~

1 13 . (Original): The display unit according to claim 12 wherein the display
2 panel, the scan driver, and the data driver constitute a display module; wherein a receiver of the
3 interface section is positioned toward the display module; and wherein a transmitter of the
4 interface section transmits a video signal from the video processor circuit to the receiver in
5 digital form.

14 . (Canceled)